

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

STRYKER CORP., et al.,

Plaintiffs/Counter-Defendants,

CASE NO. 1:10-cv-1223

v.

HON. ROBERT J. JONKER

ZIMMER, INC., et al.,

Defendants/Counter-Plaintiffs.

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CLAIM CONSTRUCTION MEMORANDUM OPINION AND ORDER

INTRODUCTION

This is a patent infringement case. Stryker Corporation, Stryker Puerto Rico, Ltd., and Stryker Sales Corporation (collectively, “Stryker”) allege that Zimmer Inc. and Zimmer Orthopaedic Surgical Products (collectively, “Zimmer”) are infringing one or more of three Stryker patents, including U.S. Patent Nos. 6,022,329 (the “‘329 patent”), 6,179,807 (the “‘807 patent”), and 7,144,383 (the “‘383 patent”). (Compl., docket #1, ¶¶ 11-13.) Both companies work in the medical technology field, developing and marketing products relating to various medical specialties. (*Id.* ¶¶ 6-10.) The patents at issue in this case pertain to pulsed lavage irrigation systems, which are commonly used in orthopedic surgeries and wound management to remove blood and other debris from surgical sites. (Stryker’s Br., docket # 66, at 5.)

At the Court’s invitation, the parties have identified terms for which they believe construction is most important to advance the case, and they have proposed competing constructions of most of these terms. (Jt. State., docket # 61.) The Court heard oral argument on the parties’ proposed

constructions on January 18, 2012. This Claim Construction Memorandum contains the Court's construction of these disputed terms.

CLAIM CONSTRUCTION PRINCIPLES

When the meaning of a claim's language is disputed, the court must construe the claim as a matter of law. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), *aff'd* 517 U.S. 370, 116 S. Ct. 1384 (1996). Proper claim construction begins with the language of the claims themselves. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). “In construing claims, the analytical focus must begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to particularly point[] out and distinctly claim[] the subject matter which the patentee regards as his invention. 35 U.S.C. § 112, ¶ 2.” *Brookhill-Wilk I, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 (Fed. Cir. 2003) (quoting *Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001) (internal quotations omitted)). The Court must give claim terms the ordinary and customary meaning ascribed to them by “a person of ordinary skill in the art in question at the time of the invention, i.e, as of the effective filing date of the patent application.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc).

When interpreting a claim as understood by a person of ordinary skill in the art, the court first examines the intrinsic evidence before it, which includes not only the claim language, but also the written description and the prosecution history of the patent. *Phillips*, 415 F.3d at 1319. Terms that have a plain and ordinary meaning typically do not need to be construed, as their meaning is clear from the term itself. *See Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1207 (Fed. Cir. 2010). A court considers the written description “because it is relevant not only to aid in the claim

construction analysis, but also to determine if the presumption of ordinary and customary meaning is rebutted.” *Brookhill-Wilk I, LLC*, 334 F.3d at 1298. In fact, the specification is usually “the single best guide to the meaning of a disputed term.” *Vitronics*, 90 F.3d at 1582. The prosecution history may also be considered to “inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Phillips*, 415 F.3d at 1317.

A court may also consider extrinsic evidence, such as dictionaries, treatises, and expert or inventor testimony, in construing patent claims. *See id.* Technical dictionaries may help a court understand “the meaning of particular terminology to those of skill in the art of the invention.” *Id.* at 1318. Likewise, expert testimony may be useful for explaining the technology at issue and how the particular invention works, to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of ordinary skill in the art, or to establish that a particular claim in the patent or in prior art has a particular meaning in the pertinent field. *See id.*

While a court may consider both intrinsic and extrinsic evidence, intrinsic evidence is generally more reliable and thus generally entitled to greater weight when construing a claim term. *See id.* at 1320-21. What ultimately controls, however, is the language of the claims themselves: “[T]he court’s focus [must] remain[] on understanding how a person of ordinary skill in the art would understand the claim terms.” *Id.* at 1323. Thus, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Id.* at 1316 (quoting *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1995)).

CLAIM ANALYSIS

1. ‘329 Patent, Claim 2: “trigger”

The parties propose the following constructions of the term “trigger” as it appears in claim 2 of the ‘329 patent:

Claim Term	Stryker’s Proposed Claim Construction	Zimmer’s Proposed Claim Construction
‘329, col.22, l.3: an elongate <u>trigger</u> movably mounted on said housing;	A lever pulled by a finger or fingers to activate a device or mechanism (Jt. State., docket # 61.)	Resilient lever designed to be pulled in a single direction (Jt. State., docket # 61.)

The parties agree that a trigger in claim 2 is a lever pulled by a user. (Zimmer’s Br., docket # 76, at 9.) The parties also agree that the purpose of the trigger is “to activate a device or mechanism,” although Zimmer argues that the inclusion of this stated purpose “is an unnecessary addition to the definition.” (*Id.* at 9 n.4.(citing *Symantec Corp. v. Computer Assocs. Int’l, Inc.*, 522 F.3d 1279, 1288 (Fed. Cir. 2008) (holding that claim language stating a “purpose or intended use,” often found in the preamble, is typically not limiting))). The issue is whether the trigger in claim 2 must “inherently return[] to its initial, resting position once the pulling force has been removed.” (*Id.*)

Zimmer argues that “unidirectional pulling and resiliency are characteristics inherent to a trigger.” (*Id.* at 10.) Zimmer’s bases this argument largely on the ‘329 patent specification, which describes a “trigger lever 242 . . . bendable . . . in a resilient manner,” and that “[u]pon release of the trigger by the user, the natural resilience of the trigger lever 242 unbends it back to its . . . forward position . . . without need for a separate return spring.” (‘329 patent, docket # 77-1, at 13:39-56.) Stryker counters that a person of ordinary skill in the art would understand the “trigger” to describe any lever that could be pulled to operate a device or mechanism without necessarily returning to its

resting position after being pulled by a user, and that Zimmer’s construction is improperly limited to “the precise embodiment described in the specification.” (docket #66, at 12.)

The starting point is the language of claim 2 itself. *See Phillips*, 415 F.3d at 1317. Nothing in the language of claim 2 requires the trigger to be resilient. (docket # 77-1, at 22:3.) The only word directly modifying “trigger” is “elongate,” which in no way requires or implies resilience. To the extent the specification describes resilience as one feature of the trigger on the preferred embodiment, the absence of any resilience requirement in the claim itself suggests that Stryker in no way meant to limit the trigger in claim 2 to resilient, elongate triggers, as opposed to all elongate triggers. The Federal Circuit has made clear that “one of the cardinal sins of patent law . . . [is] reading a limitation from the written description into the claims.” *Phillips*, 415 F.3d at 1319-20; *see also Agfa Corp. v. Creo Prods. Inc.*, 451 F.3d 1366, 1376 (Fed. Cir. 2006) (“As noted, this court has repeatedly rejected the contention that depiction of a single embodiment in a patent necessarily limits the claims to that depicted scope.”). While the trigger lever 242 described in the specification is made of a resilient plastic material that allows it to return to its original resting position after being released by a user, it is the function of the trigger—to engage the motor and allow for “power pulsing” of the wound site—that defines it and sets it apart from other types of levers (resilient or otherwise). Contrary to Zimmer’s position, the inclusion of the trigger’s function is a necessary and appropriate component of its definition, and the addition of the word “resilient” is not.

The extrinsic evidence also supports Stryker’s proposed construction. For example, the dictionary definition discussed in both parties’ briefs defines “trigger” as “1. The lever pressed by the finger to discharge a firearm. 2. Any similar device used to release or activate a mechanism.” AMERICAN HERITAGE ILLUSTRATED ENCYCLOPEDIA DICTIONARY 1758 (1987). Although the firearm

provides a helpful illustration of a trigger, the definition of trigger is obviously not limited to firearm applications. Rather, the term is used to describe any similar lever that releases or activates a mechanism. *See also* CHAMBERS CONCISE DICTIONARY 1141 (1991) (defining “trigger” as “a lever that releases a catch so as to fire a gun or set a mechanism going; anything that starts a train of actions”); WEBSTER’S NINTH NEW COLLEGIATE DICTIONARY 1261 (1991) (defining a “trigger” as a “movable part by which a mechanism is actuated”). The prior art is full of examples of the term “trigger” being used in a variety of applications that do not necessarily incorporate inherent resilience into the definition. (docket ## 87-91, Exs. O-AA.)¹ Therefore, the Court is persuaded that a person of ordinary skill in the art would construe “trigger” consistent with Stryker’s proposed definition, and not the narrower definition Zimmer advocates. The Court therefore adopts Stryker’s proposed construction of the term.

2. ‘329 Patent, Claim 2: “handle”

The parties propose the following constructions of the term “handle” as it appears in claim 2 of the ‘329 patent:

Claim Term	Stryker’s Proposed Claim Construction	Zimmer’s Proposed Claim Construction
‘329, col.22, l.2: a hollow housing comprising a <u>handle</u> ;	A portion of a device designed to be held by a hand or hands. (Jt. State., docket # 61.)	Plain and ordinary meaning; no construction necessary (Jt. State., docket # 61.)

The first question is whether to construe the term at all. Zimmer argues that no construction is

¹ Indeed, as Stryker notes in its Reply Brief, Zimmer’s own engineering and marketing materials relating to the allegedly infringing device appear to treat its device’s rocker switch as a type of trigger even though it is not resilient. (docket # 86, at 6.) This is obviously not dispositive, though it provides further confirmation of the Court’s construction in this case.

required because the term “has a well-understood meaning that is clear to persons of ordinary skill in the art,” and that “fact and expert witnesses are capable of proffering testimony regarding whether an accused product satisfies the term handle, so the jury can decide the fact inquiry.” (docket # 76, at 11.) Consequently, Zimmer does not propose a claim construction. Stryker argues a construction is necessary, given the parties’ inability to agree on the term’s meaning in this case. (docket # 66, at 13.)

“When the parties raise an actual dispute regarding the proper scope of . . . [a] claim[], the court, not the jury, must resolve the dispute.” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008). “In some cases, the ordinary meaning of claim language . . . may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Id.* (citing *Phillips*, 415 F.3d at 1312-13). It is true in this case that Stryker to some extent relies on plain and ordinary meaning even though it advocates construction of the term. But construction is still appropriate because Zimmer argues the plain and ordinary meaning of the term necessarily excludes something Stryker claims for it. Because the parties disagree, claim construction is required.

At issue is claim 2 of the ‘329 patent, which provides that the claimed “pulsed irrigation surgical handpiece” includes “a hollow housing comprising a handle; . . . an irrigation liquid tube extending along said handle; [and] an electric motor spaced between the top and bottom of said handle and located in said handle” (docket # 77-1, at 22:1-8.) Stryker argues the claim language and specification “supports a broad construction of ‘handle’ according to its plain and ordinary meaning.” (docket # 66, at 13.) Specifically, Stryker constructs “handle” to mean “a portion

of a device designed to be held by a hand or hands.” (*Id.*) Zimmer objects to Stryker’s construction because it would impermissibly construe “handle” to “read not only on the handle but also on what one of ordinary skill in the art would understand to be the barrel of a pistol-shaped device.” (docket # 76, at 12.)

The Court adopts Stryker’s proposed claim construction. According to the specification, “[t]o use the apparatus for irrigation of a surgical site, the user grips the handpiece, either by the handle 12, in a pistol-like manner, or where the barrel 13 joins the handle 12, in a wand like manner.” (docket # 77-1, at 20:48-51.) A person of ordinary skill in the art would interpret the specification consistent with Stryker’s position—that the irrigation device’s handle is the portion of the device designed to be held by a hand. The ‘329 claim language also supports this interpretation, as claim 2 does not necessarily require the inclusion of a barrel, which is a feature of the preferred embodiment that appears to be captured in dependent claim 4. (*Id.* at 22:1-42.) Moreover, despite Zimmer’s concerns, Stryker’s construction would not necessarily include the definition “barrel 13” within the definition of “handle 12.” Rather, it would depend on whether the barrel 13 of an allegedly infringing product was “designed to be held by a hand”—a question that the Court leaves for subsequent motion practice and, as necessary, trial.² Finally, the Stryker construction is also consistent with the extrinsic evidence. *See, e.g.*, WEBSTER’S UNABRIDGED DICTIONARY 642 (1989)

² The Court does not rely on Stryker’s argument based on Figure 4 of the ‘329 patent. (docket # 66, at 13.) In Figure 4, the term “housing handle” is identified with specification reference numerals 11, 12, and 15, which Stryker argues is persuasive intrinsic evidence in support of its position. (*Id.*) The use of “handle” in these discrete instances appears to be a typographical error. Indeed, other than the instances cited in Stryker’s brief, reference numeral 11 is consistently defined as the “housing” throughout the ‘329 specification, and numerals 12 and 15 are used to describe the left- and right-hand sides of the housing, and not component parts of the “handle.” (*See, e.g.*, docket # 67-2, ‘329 patent, at 3:28-39.)

(defining “handle” to mean “a part of a thing made specifically to be grasped or held by the hand”); WEBSTER’S NINTH NEW COLLEGIATE DICTIONARY 550 (1991) (defining “handle” to mean “a part that is designed especially to be grasped by the hand.”)

3. ‘329 Patent, Claim 2: “adjacent”

The parties propose the following constructions of the term “adjacent” as it appears in claim 2 of the ‘329 patent:

Claim Term	Stryker’s Proposed Claim Construction	Zimmer’s Proposed Claim Construction
‘329, col.22, 1.5-7: an electric motor spaced between the top and bottom of said handle and located in said handle <u>adjacent</u> said irrigation tube;	Close to or lying near (Jt. State., docket # 61.)	Plain and ordinary meaning; no construction necessary (Jt. State., docket # 61.)

Once again, the parties dispute whether this term requires construction. Zimmer argues that construction is not necessary because Stryker’s definition simply “replaces one commonly word with several.” (docket # 76, at 17.) Stryker counters that its proposed definition is consistent with the term’s plain meaning and the evidence of record, and that because Zimmer refuses to adopt the construction, a dispute exists as to the term’s definition, which creates a question that the Court must address as a matter of law. (docket # 66, at 15-16.) Because a claim construction dispute exists, and for the reasons discussed above in the context of the Court’s “handle” analysis, the Court engages in a claim construction analysis of “adjacent.” *See O2 Micro Int’l Ltd.*, 521 F.3d at 1360.

Here, Stryker’s proposed construction of “adjacent” as “close to or lying near” is consistent with the claim language and the specification. The preferred embodiment in the specification

describes a “DC energizable electric motor 36” that “is snugly housed in the space between the left and right . . . shell parts 30 and 31” that surround the motor 36, and a liquid hose 160 that is located between the shell parts 30 and 31 and the housing 11. (docket # 77-2, at fig. 4, 4:1-8, 9:40-58.) The claim language describes an electric motor that is located within the handpiece’s handle “adjacent said irrigation tube.” (*Id.* at 22:5-7.) Nothing in the intrinsic—or extrinsic evidence for that matter—reveals any reason to deviate from the meaning of the word routinely used in other constructions. Courts routinely construct terms such as “adjacent,” often providing definitions similar to what has been advocated here. *See, e.g., Free Motion Fitness, Inc. v. Cybex Int’l, Inc.*, 423 F.3d 1343, 1348-49 (Fed. Cir. 2005) (construing “adjacent” as “not distant”); *Totes Isotoner Corp. v. Panther Vision, LLC*, No. 09-cv-1064, 2010 WL 55673, at *10 (N.D. Ill. Jan. 4, 2010) (construing “adjacent” as “closely proximate”); *Aero Indus., Inc. v. Quick Draw Tarpaulin Sys., Inc.*, No. 1:05-cv-0439, 2009 WL 838684, at *11 (S.D. Ind. Mar. 27, 2009) (construing “adjacent” to mean “close to, next to, or lying near”); *Bridgelux, Inc. v. Cree, Inc.*, No. 9:06-cv-240, 2008 WL 2325623, at *10-*11 (E.D. Tex. June 3, 2008) (construing “adjacent” to mean “near or next to”). The parties are then required to provide competent testimony as to how a person of ordinary skill in the art interprets “adjacent,” “close to,” or “lying near” in the technology at issue—in this case, pulsed lavage irrigation systems.

Zimmer asserts that because the irrigation handpiece at issue is by its nature compact and self-contained, adopting Stryker’s definition “would effectively read the [adjacent] limitation[] out of the claim,” and that “Stryker could argue that virtually all the parts are close to or near to one another.” (docket # 76, at 17.) Zimmer’s concern is without merit. As the Federal Circuit has repeatedly emphasized, claim construction must be consistent with the understanding of “a person

of ordinary skill in the art in question at the time of the invention.” *Phillips*, 415 F.3d at 1312. In other words, the term “adjacent” is not interpreted in a vacuum, but rather is informed by the field of technology, what is considered common knowledge in the field, and the invention itself. *See id.* For example, what constitutes “close” in horseshoes is markedly different than when dealing with hand grenades. Context makes all the difference.

Accordingly, the Court adopts Stryker’s proposed construction of the claim term.

4. ‘807 Patent, Claim 45: “lock assembly”

Claim Term	Stryker’s Proposed Claim Construction	Zimmer’s Proposed Claim Construction
‘807, col.27, l.35-37: a <u>lock assembly</u> mounted to the front end of said body for releasably securing the discharge tube and the suction tube to said body;	Components that work together to secure or fasten the tip to the hand piece (Jt. State., docket # 61.)	Subject to 35 U.S.C. § 112 ¶ 6. <u>Function</u> : releasably securing the discharge tube and the suction tube to said body <u>Structure</u> : a tip lock, a spring plate, a biasing bar, and a flange on a tip assembly (Jt. State., docket # 61.)

Claim 45 of the ‘807 patent provides for “a lock assembly mounted to the front end of said body for releasably securing the discharge tube and the suction tube of said body.” (‘807 patent, docket # 77-2, at 27:35-37.) The basic dispute here is whether the “lock assembly” of claim 45 is subject to a means-plus-function analysis under 35 U.S.C. § 112 ¶ 6. Zimmer argues that a person of ordinary skill in the art would not understand “lock assembly” to connote structure, and that as a result, the claimed structure must be limited to the embodiment disclosed in the specification—a tip lock, spring plate, biasing bar, and flange that work together to secure the tip assembly to the body of the irrigation handpiece. (docket # 61.) Stryker counters that a person of ordinary skill

would understand “lock assembly” as a structural term, and that section 112 ¶ 6 does not apply. Instead, Stryker broad construes “lock assembly” as “components that work together to secure or fasten the tip to the hand piece.” (*Id.*)

The Court first considers whether the “lock assembly” in claim 45 is indeed structural under section 112 ¶ 6, which provides that:

[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112 ¶ 6. This type of claim analysis applies to “purely functional limitations that do not provide the structure that performs the recited function,” *Phillips*, 415 F.3d 1311, which generally includes the hallmark “means” language that creates a rebuttable presumption that section 112 ¶ 6 applies. *See Personalized Media Comm’n, LLC v. Int’l Trade Comm’n*, 161 F.3d 696, 703-04 (Fed. Cir. 1998). “By contrast, a claim term that does not use ‘means’ will trigger the rebuttable presumption that section 112 ¶ 6 does not apply.” *Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1371-72 (Fed. Cir. 2003) (citations omitted). “When a claim terms lacks the word ‘means,’ the presumption can be overcome if the challenger demonstrates that ‘the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.’” *Thyssenkrupp Elevator Ams. Corp.*, 649 F.3d 1350, 1356 (Fed. Cir. 2011). “[T]he presumption flowing from the absence of the term ‘means’ is a strong one that is not readily overcome.” *Id.*; *see also Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1362 (Fed. Cir. 2004) (“[W]e have seldom held that a limitation not using the term ‘means’ must be considered to be in means-plus-function form. In fact, we have identified only one published

opinion since [*Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580 (Fed. Cir. 1996)] in which we have done so.”) Given the absence of any “means” language with respect to the “lock assembly” term in claim 45, Zimmer bears the burden of overcoming the presumption against applying section 112 ¶ 6—a burden it fails to carry in this case.

Zimmer argues that the Court must engage in a mean-plus-function analysis because “lock assembly” is simply too indefinite if not limited to the structure explicitly disclosed in the ‘807 patent specification. (docket # 76, as 19.) This argument is unavailing. As the Federal Circuit explained in *Lighting World, Inc. v. Birchwood Lighting, Inc.*,

In considering whether a claim term recites sufficient structure to avoid application of section 112 ¶ 6, we have not required the claim term to denote a specific structure. Instead, we have held that it is sufficient if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the term identifies structures by their function.

382 F.3d at 1360 (citations omitted). In *Lighting World*, the Court recognized the possibility that applying these principles may result in a broad construction of a particular claim term that “renders a claim more vulnerable to attack for invalidity, but that the risk is one that the “claim drafter assumes by choosing broad structural terms rather than choosing to claim in means-plus-function format.” *Id.* at 1362.

Applying these rules of construction to the “lock assembly” in claim 45, the Court concludes that a person of ordinary skill would understand “lock assembly” to connote structure, and section 112 ¶ 6 therefore does not apply. Claim 45 provides for “a lock assembly mounted to the front of said body for releasably securing the discharge tube and the suction tube to said body.” (docket # 77-2, at 27:35-37.) A person of ordinary skill in the art would understand this claim term as

describing a structure that locks the tip assembly 30 to the handpiece 22 of the irrigation system. (*Id.* at 10:12-13.) While Zimmer correctly notes that the term would cover a broad range of structures if not subject to section 112 ¶ 6, the term is structural nonetheless. Consequently, the Court declines to apply the section 112 ¶ 6 analytical framework to “lock assembly” or otherwise limit its scope to the embodiment disclosed in the specification.

Zimmer’s reliance on *Toro Co. v. Deere & Co.*, 355 F.3d 1313 (Fed. Cir. 2004), is unavailing. In *Toro*, the Federal Circuit held that the term “control mechanism” as used in the patent at issue did not provide sufficient structural description for a person of ordinary skill in the art to understand its meaning to connote structure. *Id.* at 1325. Zimmer attempts to analogize *Toro* to the present case, arguing that the “lock assembly” in claim 45 similarly lacks structure. This analogy fails to persuade the Court for two reasons. First, unlike the “lock assembly” in the ‘807 patent, the patentee in *Toro* used the terms “control means” and “control mechanism” interchangeably in the claim language, leading the court to conclude section 112 ¶ 6 applies. *Id.* at 1323, 1325. In other words, the intrinsic evidence provided a clear indication that “control mechanism” was not a structural term, but was rather a functional limitation synonymous with “control means.” Here, Stryker gave no such indication in the ‘807 claim language, as it did not use “lock assembly” interchangeably with “locking means” anywhere in the ‘807 patent. Second, when construing “assembly” in a variety of mechanical and electrical applications, courts have consistently held that “assembly” connotes sufficient structure to avoid section 112 ¶ 6. *See, e.g., Kegel & Co. v. AMF Bowling, Inc.*, 127 F.3d 1420, 1427 (Fed. Cir. 1997); *Alto-Shaam, Inc. v. Cleveland Range, LLC*, No. 7:09-cv-018, 2010 WL 2382249, at *16-*18 (N.D. Tex. June 7, 2010); *Fitness Quest Inc. v. Monti*, No. 5:06-cv-2691, 2007 WL 2359821, at *8 (N.D. Ohio Aug. 16, 2007). Indeed, in *Lighting World*

(which was decided after *Toro*), the Federal Circuit held “connector assembly” was structural, and that the term should not be limited to the structure disclosed in the specification. 382 F.3d at 1363. While not dispositive, these other constructions further support the Court’s conclusion, as do dictionary definitions, which define “assembly” as a noun connoting structure. *See, e.g.,* AMERICAN HERITAGE ILLUSTRATED ENCYCLOPEDIA 42 (1987).

Although section 112 ¶ 6 does not apply, the Court must still provide a claim construction of the term. The ‘807 specification explains that a common problem with prior surgical irrigation handpieces was their tendency to leak during use. (docket # 77-2, at 1:59-2:6.) According to the specification, leakage was particularly common when the handpiece’s tip assembly was subject to side loading. (*Id.*) To address this problem, the ‘807 patent provides for a lock assembly that secures the tip assembly 30 to the handpiece 22. (*Id.* at 10:13-14.) The preferred embodiment teaches a tip assembly 30 that is pushed towards the handpiece 22 until the flange 186 of the discharge tube 32 passes through the opening 154 of the lock assembly. (*Id.* at 10:17-19.) “As the discharge tube 32 passes through the opening 154, [the] tapered surface 188 of [the] flange 186 abuts the complementary beveled surface 155 around [the] opening 154. Further insertion of the discharge tube 32 thus serves to displace the tip lock 152 upwardly. Once [the] flange 186 passes beyond [the] tip lock 152, [the] spring plate 160 forces the tip lock 152 to return to its initial position,” thereby mechanically locking the tip assembly 30 to the handpiece 22. (*Id.* at 10:19-31.)

While only providing a single embodiment of the lock assembly, the specification makes clear that “there is no requirement that all versions of the invention employ the described tip lock. Other versions of the invention may employ other tip locks and even other tip assemblies.” (*Id.* at 21:40-43.) Stryker argues that a person of ordinary skill in the art would understand “lock assembly”

to mean “components that work together to secure or fasten the tip to the hand piece.” The Court agrees, as this definition is consistent with not only the claim itself, but also the preferred embodiment in the specification, which teaches a design that uses several components to secure the tip assembly 30 to the handpiece 22. Extrinsic dictionary evidence provide further confirmation of the Court’s construction, as “lock” is defined as “a device used to provide restraint,” and “assembly” is defined as “the putting together of manufactured parts to make a completed product.” AMERICAN HERITAGE ILLUSTRATED ENCYCLOPEDIA 991 (1987).

Accordingly, the Court construes “lock assembly” to mean “components that work together to secure or fasten the tip to the hand piece.”

5. *‘383 Patent, Claim 1: “motor operable at variable speeds”*

The parties propose the following constructions for “motor operable at variable speeds” in claim 1 of the ‘383 patent:

Claim Term	Stryker’s Proposed Claim Construction	Zimmer’s Proposed Claim Construction
‘383, cl.1, col.21, l.58-61: a single electric motor disposed in said housing and connected to said pump for actuating said pump, said <u>motor operable at variable speeds</u> to control the pumping rate of said pump;	A motor that can operate at more than one speed (Jt. State., docket # 61.)	Motor with continuously varying speed (Jt. State., docket # 61.)

The parties disagree on the meaning of the phrase “operable at variable speeds.” Stryker argues that “motor operable at variable speeds” includes any motor that can operate “at more than one speed.” (Jt. State., docket # 61.) In contrast, Zimmer submits that the claim term is limited to only those

motors that can run at “continuously varying speed[s].” (*Id.*)

The Court adopts Stryker’s proposed construction because it is consistent with the intrinsic evidence of record, and Zimmer’s is not. Claim 1 of the ‘383 patent provides for “a single electric motor,” with the “motor operable at variable speeds to control the pumping rate of said pump.” (docket # 77-3, at 21:58-61.) A person of ordinary skill in the art would understand the use of the term “variable” that modifies “speed” to mean a motor operating at more than one speed. However, there is nothing in the plain language of claim 1 that inherently requires a continuous spectrum of speed. In fact, Zimmer’s proposed construction tacitly recognizes this by using the core claim language in its proposed construction and simply adding the modifier “continuously” to it. The claim language, in contrast, does not include the limiting modifier, or anything like it.

The specification of the ‘383 patent reinforces the point. It describes the preferred embodiment of the medical irrigator. The specification describes a motor 36 that a user can turn on using a trigger lever 242 that is made of bendable, resilient plastic. (*Id.* at 14:54-64.) The rest position of the trigger lever 242 allows the motor 36 to remain in the “off” position. (*Id.*) When a user exerts a “light pull on the trigger lever 242,” the motor 36 turns on, and “electric current is fed to the motor 36 only from half the battery collection,” causing the motor 36 to run “at only a preselected fraction of its full speed and the pump unit 100 outputs irrigation liquid pulses at a desired frequency and amplitude, which are less than the maximum available” (“lower power pulsing”). (*Id.* at 14:64-15:10.) “Further pulling in of the trigger lever 242 by the user . . . establishes electrical contact . . . [that] appl[ies] the full series of voltage . . . to the motor 36 to operate the latter at its full speed and thereby drive the pump unit 100 at its full output” (“high power pulsing”). (*Id.* at 15:11-15:25.) In sum, the preferred embodiment teaches a motor with three

discrete predetermined speed settings: “off,” lower power pulsing (which engages half of the battery pack power source), and high power pulsing (which engages all of the battery pack power source). (*Id.* at 21:1-2.) It does not include a continuous spectrum of varying speeds.

The problem with Zimmer’s proposed construction is that it unduly limits the claim term to “continuously variable speed” motors, excluding the preferred embodiment just discussed. Zimmer’s construction would require the irrigator to operate on a continuous speed spectrum, excluding motors that only operate at predetermined, discrete speed settings. The Federal Circuit has repeatedly held, “[a] claim construction that excludes the preferred embodiment is rarely, if ever, correct.” *Adams Respiratory Therapeutics, Inc. v. Perrigo Co.*, 616 F.3d 1283, 1290 (Fed. Cir. 2010). Zimmer’s proposed construction runs afoul of this fundamental principle, as it would exclude the preferred embodiment disclosed in the specification, and nothing in the intrinsic or extrinsic evidence supports that.

At oral argument, Zimmer relied almost exclusively on the prosecution history to support its narrower definition of the term, but the reliance is misplaced. The record before the Court provides no reason to infer that Stryker’s amendment during prosecution—which cancelled virtually all of its original claims and substituted new ones—was intended to narrow the type of motor the allowed claims cover. “Unless altering claim language to escape examiner rejection, a patent applicant only limits claims during prosecution by clearly disavowing claim coverage.” *See IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1439 (Fed. Cir. 2000). The record does not provide any evidence that indicates Stryker amended its claims to disavow any portion of the claim language’s plain

meaning.³ Consequently, the Court declines to narrow its construction on this basis, instead adopting Stryker's construction of "motor operable at variable speeds" to mean "a motor that can operate at more than one speed."

- 6-7. '383 Patent, Claim 10, 38: "variable speed electric motor"
 '383 Patent, Claim 20: "motor operating at variable speeds"

The parties also disagree as to the construction of "variable speed electric motor" in claims 10 and 38 of the '383 patent, and "motor operating at variable speeds" in claim 20, as illustrated below:

Claim Term	Stryker's Proposed Claim Construction	Zimmer's Proposed Claim Construction
<p>'383, cl. 10, col.22, l.53-55: a single, <u>variable speed electric motor</u> in said housing that is connected to said pump that actuates said pump so as to regulate the pumping rate of said pump;</p> <p>'383, cl. 38, col.26, l.5-7: a single, <u>variable speed electric motor</u> disposed in said housing connected to said pump for actuating said pump at variable rates;</p>	<p>An electric motor that can operate at more than one speed (Jt. State., docket # 61.)</p>	<p>Electric motor with continuously variable speed (Jt. State., docket # 61.)</p>

³ Stryker's claim amendment replaced all mention of "plural speed motors" with "variable speed motors" without any discussion as to the difference between the two, and narrowing the claim term based on this modification is not warranted.

'383, col.23, l.56-59: a single electric motor disposed in said housing and connected to said pump to actuate said pump, said <u>motor operating at variable speeds</u> to regulate the pumping rate of said pump;	A motor that can operate at more than one speed (Jt. State., docket # 61.)	Motor with continuously varying speeds (Jt. State., docket # 61.)
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With respect to these claim terms, each party simply proposes the same construction as in claim 1, with the only exception that both parties' construction of "variable speed electric motor" in claims 10 and 38 provides the additional limitation that the motor must be electric. Because the constructions proposed for claims 1, 10, 20, and 38 all replicate each other, the Court will apply the same analysis to all of these claims and adopt Stryker's construction of the terms. *See Frank's Casing Crew & Rental Tools, Inc. v. Weatherford Int'l, Inc.*, 389 F.3d 1370, 1377 (Fed Cir. 2004.)

Accordingly, the Court construes "variable speed electric motor" as "an electric motor that can operate at more than one speed," and construes "motor operating at variable speeds" as "a motor that can operate at more than one speed."

8. '383 Patent, Claims 1, 20, and 38: "control assembly"

Claim Term	Stryker's Proposed Claim Construction	Zimmer's Proposed Claim Construction
'383, cl.1, col.21, l.62-63: a <u>control assembly</u> disposed in said housing to regulate the speed of said motor; '383, cl. 20, col.23, l.66-col.24, ln.4:	Components that work together to energize the motor (Jt. State., docket # 61.)	Subject to 35 U.S.C. § 112 ¶ 6. <u>Function:</u> - Claim 1: regulate the speed of said motor - Claim 20: control the speed of said motor and regulate the pumping rate of said pump - Claim 38: supplying a variable

<p>a <u>control assembly</u> integral with said housing, said control assembly having a switch member moveably mounted to said housing and said control assembly being configured to apply a variable energization signal from said battery pack to said motor so as to control the speed of said motor and regulate the pumping rate of said pump.</p> <p>‘383, cl. 38, col.26, l.15-24:</p> <p>a <u>control assembly</u> attached to said housing and connected between said at least one conductor of said motor for supplying a variable potential energization signal to said motor, said control assembly having a single switch member that is moveably attached to said housing that selectively makes/breaks a connection between said at least one conductor and said motor and that establishes the potential of the energization signal supplied to said motor.</p>		<p>potential energization signal to said motor</p> <p><u>Structure:</u> an L-shaped trigger member with an elongate trigger lever, a single switch contact support arm, a single conductive contact blade, two posts integral with the housing that are configured for electrical contacts to be mounted on them, two electrically-conductive, spring-like metal contacts mounted to said posts, and two electrically conductive contacts protruding rearwardly from the motor, one being a springy rectangular piece that is bent intermediate its ends in a dogleg fashion.</p> <p>(Jt. State., docket # 61.)</p>
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Similar to the issue between the parties regarding the “lock assembly” claim construction, the parties disagree as to whether “control assembly” requires the Court to engage in a means-plus-function analysis under 35 U.S.C. § 112 ¶ 6. Zimmer argues that the term “does not convey sufficiently definite structure to one of ordinary skill in the art,” and the claim term must therefore be limited to the structures disclosed in the ‘383 patent specification. (docket # 76, at 25.) Stryker disagrees, arguing that “[i]n the context of the ‘383 patent, a person of ordinary skill would understand the term ‘control assembly’ to mean ‘components that work together to energize the motor.’” (docket # 66, at 22.) Zimmer bears the burden of proving section 112 ¶ 6 applies. *Thyssenkrupp*, 649 F.3d at 1356. The Court concludes that Zimmer has not carried its burden.

Claims 1 and 38 of the ‘383 patent both provide for a control assembly in the housing of the handheld irrigator “to regulate the speed of [the] motor” by “apply[ing] a variable energization signal” to the motor from the irrigator’s battery pack “to control the speed of said motor” and to “regulate the pumping rate of [the] pump.” (docket # 77-3, at 23:66-24:4; 26:15-24.) As discussed above, the term “assembly,” though broad, would connote structure to a person of ordinary skill in the art. *See Lighting World*, 382 F.3d at 1363; *Kegel*, 127 F.3d at 1427; *Alto-Shaam*, 2010 WL 2382249 at *16-*18; *Fitness Quest*, 2007 WL 2359821, at *8. Stryker did not utilize means-plus-function language within the claim, and the Court sees no reason to apply section 112 ¶ 6 in its absence, given the structure the term “control assembly” connotes as used in the ‘383 patent.

Even though section 112 ¶ 6 does not apply, a construction is still necessary in light of the parties’ disagreement as to the term’s plain and ordinary meaning. Claims 20 and 38 state that the control assembly includes a “switch member,” and that the assembly must be configured “to apply a variable energization signal” from the batteries in order to power and control the speed of the

motor and regulate the irrigation pump rate. (*Id.* at 23:66-24:4; 26:15-24.) Against this backdrop, a person of ordinary skill in the art would construe the “control assembly” in the ‘383 patent as “components that work together to energize the motor,” which is the construction Stryker proposes and the Court adopts as to this claim term. *See Lighting World, Inc.*, 382 F.3d at 1360 (holding that structural definitions may identify their function).

This construction is further confirmed when claims 20 and 38 are read in conjunction with dependent claims 22 and 40, which recite additional structural requirements of the control assembly. Claim 22 provides a claim requirement that further requires the control assembly to include two electrical conductors that are positioned so that “a switch member can be . . . positioned to: connect neither of said cable conductors to said motor; connect the first said cable conductor to said motor; or connect the second said cable conductor to said motor.” (docket # 77-3, at 24:20-29.) Claim 42 requires a similar cable conductor configuration. (*Id.*) If the Court adopted Zimmer’s narrow definition, the construction of the independent claims would render the dependent claims superfluous—an outcome strongly disfavored when construing a claim term. *See, e.g., Phillips*, 415 F.3d at 1315; *Yoon Ja Kim v. ConAgra Foods, Inc.*, 465 F.3d 1312, 1319 (Fed. Cir. 2006); *Versa Corp. v. Ag-Bag Int’l Ltd.*, 392 F.3d 1325, 1330 (Fed. Cir. 2004).

The extrinsic evidence further confirms the Court’s construction. Generally speaking, “control” is commonly used to describe “any set of instruments used to operate, regulate, or guide a machine.” AMERICAN HERITAGE ILLUSTRATED ENCYCLOPEDIA 381 (1987). And as previously noted, “assembly” is defined as “the putting together of manufactured parts to make a completed product.” *Id.* at 42. Taken together, the Court is persuaded “control assembly” would be understood in common parlance to refer to a structure comprised of “parts that work together to

operate, regulate, or guide a machine.” Here, the “control assembly” in Claims 1 and 38 serve the express purpose of energizing the motor of the irrigator. Accordingly, the Court construes “control assembly” as “components that work together to energize the motor.”

9. ‘383 Patent, Claim 10: “switch assembly”

Claim Term	Stryker’s Proposed Claim Construction	Zimmer’s Proposed Claim Construction
<p>‘383, col.22, l.63-col.23, l.9: A <u>switch assembly</u> mounted to said housing for selectively establishing a connection between at least one of said conductors and said motor, said switch assembly having a switch element moveably attached to said handle, said switch assembly being configured so that:</p> <p>when said switch element is in a first position, said switch assembly does not supply an energization signal to said motor;</p> <p>when said switch element is in a second position, said switch assembly supplies a first energization signal from said battery pack to said motor; and</p> <p>when said switch element is in a third position, said switch</p>	<p>Components that work together to make, break or change an electric circuit (Jt. State., docket # 61.)</p>	<p>Subject to 35 U.S.C. § 112 ¶ 6.</p> <p><u>Function</u>: selectively establishing a connection between at least one of said conductors and said motor</p> <p><u>Structure</u>: a single conductive contact blade, two posts integral with the housing that are configured for electrical contacts to be mounted on them, two electrically-conductive, spring-like metal contacts mounted to said posts, and two electrically conductive contacts protruding rearwardly from the motor, one being a springy rectangular piece that is bent intermediate its ends in a dogleg fashion</p> <p>(Jt. State., docket # 61.)</p>

assembly supplies a second energization signal from said battery pack to said motor.		
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With respect to the “switch assembly” in claim 10 of the ‘383 patent, the core issue is once again whether the term connotes sufficient structure for a person of ordinary skill in the art to understand its meaning. Zimmer submits that “switch assembly” does not connote sufficiently definite structure to one of ordinary skill in the art and thus should be construed under section 112 ¶ 6, which would limit the “switch assembly” to embodiments disclosed in the specification. (docket # 76, at 27.) In contrast, Stryker argues “switch assembly” should not be limited to the embodiments in the specification under section 112 ¶ 6, but rather should be construed as “components that work together to make, break or change an electric circuit.” (docket # 61.)

Claim 10 of the ‘383 patent provides for a “switch assembly mounted to said housing for selectively establishing a connection between at least one of” the conductors included in the irrigation handpiece to the motor. (docket # 77-3, at 22:63-67.) Claim 10 further provides that the switch assembly includes a “switch element moveably attached to [the] handle” and that the switch assembly must be configured so that it provides an “off,” “first energization signal,” and “second energization signal” from the device’s battery pack to the motor. (*Id.* at 22:63-23:10.) Given that the hallmark means-plus-function language is absent from the ‘383 patent, Zimmer once again bears the burden to prove that section 112 ¶ 6 should apply.

Based on the claim language and other intrinsic evidence, however, the Court concludes a person of ordinary skill in the art would consider “switch assembly” to connote structure, and declines to apply section 112 ¶ 6. In addition to including the structural term “assembly” within the

claim, the claim provides further limitations that confirm “switch assembly” is indeed structural. For example, the switch assembly includes a “switch member,” which the parties do not dispute is a structural term, and is mounted on the housing of the irrigation handpiece. A person of ordinary skill would necessarily consider “switch assembly” as a structural term, given the structural definitions and positioning descriptions provided for in the claim language itself. Consequently, the Court holds that section 112 ¶ 6 does not apply.

The specification also supports this construction. As noted above, the “switch assembly” must be configured “for selectively establishing a connection between at least one of said conductors and said motor.” (*Id.* at 22:63-67.) A person of ordinary skill in the art would understand that a number of different switch assembly configurations could accomplish this functional requirement. The parties agree that the preferred embodiment discloses a structure consistent with Zimmer’s proposed claim construction. Contrary to Zimmer’s position, however, the Court concludes a person of ordinary skill in the art, who at a minimum possesses “a bachelor’s degree in mechanical engineering and 2-3 years of industry experience relating to the design of medical devices,” would not be limited to this disclosed configuration. (docket # 79, Milroy Decl. ¶ 18.) Rather, a person of ordinary skill in the art would define “switch assembly” as components that work together to make, break or change an electric current.

The extrinsic evidence confirms this construction. A “switch” is commonly defined as “a device for making, breaking, or changing an electric circuit.” CHAMBER’S CONCISE DICTIONARY 1081 (1991). Taken together with the definition of “assembly” discussed above, a person of ordinary skill in the art would construe a “switch assembly” to mean “components that work together for making, breaking, or changing an electrical circuit.” The Court concludes that this definition,

although expansive, conveys sufficient structure to be understood by one of ordinary skill in the art, and would indeed be the definition a person of ordinary skill in the art would associate with “switch assembly.”

Accordingly, the Court adopts Stryker’s proposed definition of the claim term.

10. ‘383 Patent, Claims 20 and 38: “switch member”

Claim Term	Stryker’s Proposed Claim Construction	Zimmer’s Proposed Claim Construction
<p>‘383, cl. 20, col.23, l.66-col.24, ln.4: a control assembly integral with said housing, said control assembly having a <u>switch member</u> moveably mounted to said housing and said control assembly being configured to apply a variable energization signal from said battery pack to said motor so as to control the speed of said motor and regulate the pumping rate of said pump.</p> <p>‘383, cl. 38, col.26, l.15-24: a control assembly attached to said housing . . . said control assembly having a single <u>switch member</u> that is moveably attached to said housing that selectively makes/breaks a connection between said</p>	<p>A part for directing an electric current (Jt. State., docket # 61.)</p>	<p>Electrically conductive contact blade (Jt. State., docket # 61.)</p>

at least one conductor and said motor and that establishes the potential of the energization signal supplied to said motor.		
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The parties disagree as to the construction of “switch member” in claims 20 and 38 of the ‘383 patent. Stryker proposes a broad construction, arguing that the “switch member” should be construed to include any part that directs an electric current. (docket # 61.) Zimmer proposes a much more limited definition, essentially seeking to limit “switch member” to an electric conductive contact blade, such as the one disclosed in the preferred embodiment. (*Id.*) Neither party has proposed a convincing construction for the term.

Stryker’s proposed definition is overly broad. While its construction would certainly encompass the contact blade disclosed in the ‘383 specification, it would also include conductors, motors, wires, and any other structure that is physically capable of “directing an electric current.” A person would not have such a broad understanding of “switch member,” particularly as it is used in the ‘383 patent. Stryker’s definition would improperly encompass various other claim limitations (the conductors and electric motor, for example), rendering claim terms superfluous and the claim itself nonsensical. In contrast, Zimmer’s definition is unduly restrictive, seeking to limit the “switch member” to the type disclosed in the preferred embodiment—a conductive contact blade. A person of ordinary skill in the art would not adopt such a limited definition. The contact blade 253 simply serves to make, break, or otherwise change the electricity flow in the handpiece’s electrical circuit, and a person of ordinary skill would construe the switch member as such.

Accordingly, the Court construes “switch member” as “a component for making, breaking, or changing an electric circuit.” This construction is preferable, as it is consistent with the ‘383

patent as a whole. As discussed above, a person of ordinary skill in the art would understand “switch” to mean “a device for making, breaking, or changing an electric circuit.” CHAMBER’S CONCISE DICTIONARY 1081 (1991). In construing “switch assembly,” the Court adopted the fundamental definition of “switch,” and sees no principled reason to depart from this definition here.

CONCLUSION

This Claim Construction Memorandum addresses only the limited patent terms the parties selected for construction at this time, hoping this Court’s construction would facilitate framing and resolution of the issues on dispositive motion practice or trial. The Court anticipates addressing any further claims construction issues in the context of dispositive motion practice, and preparation of the final pretrial order and jury instructions on any claims or defenses that go to trial.

IT IS SO ORDERED.

Dated: February 1, 2012

/s/ Robert J. Jonker
ROBERT J. JONKER
UNITED STATES DISTRICT JUDGE